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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
SHEPARD, JUSTIN E	
ART UNIT	**PAPER NUMBER**
2623	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	09/882,939	CUI ET AL.	
	Examiner	Art Unit	
	Justin E. Shepard	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 January 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,6,8 and 10-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3, 6, 8, 10-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

Claim 10 is objected to because of the following informalities: The act of storing a silent frame adjacent to an active frame is indefinite. The examiner will examine the claim with the interpretation of adjacent storage meaning storing the frames in the same memory unit. Appropriate correction is required.

Claim 22 is objected to because of the following informalities: The claim refers to encoding video when there is no mention of video being transmitted or received in independent claim 19. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3, 6, and 10-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Judge in view of Virtanen.

Referring to claim 1, Judge discloses a method, comprising:

counting a silence frame to determine a count of silence frames at a receiving station (column 4, lines 15-23);

determining a silence description frame at the receiving station (column 3, lines 35-37), the silence description frame including:

a packet that describes comfortable noise (column 3, lines 37-40),

the count of silence frames (column 4, lines 15-23 and 48-57), and

storing the silence description frame (column 4, lines 15-23).

Judge does not disclose the specifics of the silence description frame, including having a size equivalent to the size of an active frame; and wherein the silence description frame includes a first pattern to differentiate the silence description frame from the active frame, and a second pattern to indicate an end of the silence description frame.

In an analogous art, Virtanen teaches the specifics of the silence description frame, including having a size equivalent to the size of an active frame (column 2, lines 20-26); and wherein the silence description frame includes a first pattern to differentiate the silence description frame from the active frame (figure 2, part A), and a second pattern to indicate an end of the silence description frame (figure 2, part I; column 2, lines 35-36).

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the silence frame standard taught by Virtanen to the method disclosed by Judge. The motivation would have been to enable Judge to use a standard that is well

known in the art, whereby using the standard would allow for increased interoperability with between Judge and other similar devices known in the art.

Referring to claim 2, Judge discloses a method of claim 1 further comprising: receiving the active frame; and storing the active frame (figure 1, parts 104' and 115).

Referring to claim 3, Judge discloses a method of claim 1 further comprising decoding a file comprising an active frame and the silence description frame (figure 1, part 108').

Referring to claim 6, Judge discloses a method of claim 1 wherein said counting a silence frame comprises determining a sequence of frames that comprises a silence frame (column 4, lines 15-23).

Referring to claim 10, Judge discloses a method of claim 1 wherein said storing the silence description frame comprises storing the silence description frame adjacent to the active frame (column 4, lines 15-23; figure 1, part 116; Note: storing speech and silent frames in the same memory unit is interpreted as being equivalent to adjacent storage).

Referring to claim 11, Judge discloses an apparatus, comprising:

a network interface to receive packets (figure 1, parts 106 and 107);

a silence description frame filer coupled to said network interface to determine a count of silence frames based on the received packets (column 4, lines 15-23; column 3, lines 37-40); and

a data storage device coupled to said silence description frame filer to store a silence description frame (figure 1, part 116), the silence description frame including:

a packet that describes comfortable noise (column 3, lines 37-40),

the count of silence frames (column 4, lines 15-23 and 48-57).

Judge does not disclose an apparatus wherein the silence description frame having a size equivalent to the size of an active frame, and the silence description frame includes a first pattern to differentiate the silence description frame from the active frame, and a second pattern to indicate an end of the silence description frame.

Virtanen discloses an apparatus wherein the silence description frame having a size equivalent to the size of an active frame (column 2, lines 20-26), and the silence description frame includes a first pattern to differentiate the silence description frame from the active frame (figure 2, part A), and a second pattern to indicate an end of the silence description frame (figure 2, part I; column 2, lines 35-36).

At the time of the invention it would have been obvious for one of ordinary skill in the art to add the silence frame details taught by Virtanen to the method disclosed by Judge. The motivation would have been to give the frame a defined structure so that the system could interpret the data.

Claim 12 is rejected on the same grounds as claim 3.

Referring to claim 13, Judge and Virtanen do not disclose an apparatus of claim 11, wherein said network interface comprises a packet- switching interface.

The examiner takes Official Notice that it would be notoriously well known in the art to use a packet switching network interface as a network interface. At the time of the invention it would have been obvious for one of ordinary skill in the art to modify the network interface taught by Judge to use packet switching. The motivation would have been to enable large chunks of data to be divided into smaller packets that would be easier to move on a mobile network.

Referring to claim 14, Judge discloses an apparatus of claim 11, wherein said silence description frame filer comprises a microprocessor coupled to said data storage device (figure 1, parts 116 and 117).

Referring to claim 15, Judge discloses an apparatus of claim 11, wherein said silence description frame filer comprises a microprocessor to count the silence frames (column 4, lines 9-23).

Referring to claim 16, Judge discloses an apparatus of claim 11, wherein said silence description frame filer comprises a microprocessor to determine the silence description frame (column 4, lines 9-12).

Referring to claim 17, Judge discloses an apparatus of claim 11, wherein said data storage device comprises a data storage controller coupled to said silence description frame filer (figure 1, parts 116 and 117).

Referring to claim 18, Judge discloses an apparatus of claim 11, wherein said data storage device comprises a memory device coupled to said silence description frame filer (figure 1, parts 116 and 117).

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Judge in view of Virtanen as applied to claim 1 above, and further in view of Bruhn.

Referring to claim 8, Judge and Virtanen do not disclose a method of claim 1 wherein said determining a silence description frame comprises determining a frame to decode as an invalid frame.

Bruhn discloses a method of claim 1 wherein said determining a silence description frame comprises determining a frame to decode as an invalid frame (Column 4 lines 44-63 teach decoding the most error free SID frame thus some frames to decode are invalid).

At the time the invention was made it would have been obvious for one skilled in the art to modify the combined functions/devices of Judge and Virtanen using the invalid frame determining means of Bruhn for the purpose of having the most error free decoded frame.

Claims 19-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Judge in view of Virtanen in view of Smith.

Referring to claim 19, Judge discloses a system, comprising:

a transmitting station (figure 1, parts 105 and 106); and

a receiving station (figure 1, parts 106 and 107) including a silence description frame filer coupled to said transmitter to receive the packets and to store a silence description frame (figure 1, part 104'), the silence description frame including:

a packet that describes comfortable noise (column 3, lines 37-40),

the count of silence frames (column 4, liens 15-23 and 48-57).

Judge does not disclose a system wherein the transmitting station includes a variable-size packet transmitter to transmit packets; and wherein the silence description frame having a size equivalent to the size of an active frame; and where the silence description frame includes a first pattern to differentiate the silence description frame from the active frame, and a second pattern to indicate an end of the silence description frame.

Virtanen discloses an apparatus wherein the silence description frame having a size equivalent to the size of an active frame (column 2, lines 20-26), and the silence description frame includes a first pattern to differentiate the silence description frame from the active frame (figure 2, part A), and a second pattern to indicate an end of the silence description frame (figure 2, part I; column 2, lines 35-36).

At the time of the invention it would have been obvious for one of ordinary skill in the art to add the silence frame details taught by Virtanen to the method disclosed by

Judge. The motivation would have been to give the frame a defined structure so that the system could interpret the data.

Judge and Virtanen do not disclose a system wherein the transmitting station includes a variable-size packet transmitter to transmit packets.

Smith discloses a system wherein the transmitting station includes a variable-size packet transmitter to transmit packets (column 13, lines 56-59).

At the time of the invention it would have been obvious for one of ordinary skill in the art to use the variable size packet transmitter taught by Smith in the system disclosed by Judge and Virtanen. The motivation would have been to enable smaller packets to be sent when require, saving bandwidth on the mobile network.

Referring to claim 20, Judge discloses a system of claim 19, further comprising a decoder coupled to an output device (figure 1, part 108').

Referring to claim 21, Judge does not disclose a system of claim 19, wherein said variable-size packet transmitter comprises a microprocessor to encode active audio in a fixed-size packet.

Virtanen discloses a system of claim 19, wherein said variable-size packet transmitter comprises a microprocessor to encode active audio in a fixed-size packet (column 2, lines 29-36; figure 2).

At the time of the invention it would have been obvious for one of ordinary skill in the art to add the silence frame details taught by Virtanen to the method disclosed by

Judge. The motivation would have been to give the frame a defined structure so that the system could interpret the data.

Referring to claim 22, Judge, Virtanen, and Smith do not disclose a system of claim 19, wherein said variable-size packet transmitter comprises a microprocessor to encode a video difference in a fixed-size packet.

The examiner takes Official Notice that it is notoriously well known in the art to use a microprocessor to encode a video difference in a fixed-size packet. At the time of the invention it would have been obvious for one of ordinary skill in the art to add the video difference encoding to the system disclosed by Judge, Virtanen, and Smith. The motivation would have been to enable video messages to be sent from one mobile device to another.

Referring to claim 23, Judge discloses a system of claim 19, wherein said silence description frame filer comprises microprocessor to store the silence description frame (figure 1, part 116 and 117).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin E. Shepard whose telephone number is (571) 272-5967. The examiner can normally be reached on 7:30-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JS

SCOTT E. BELIVEAU
PRIMARY PATENT EXAMINER